A2500-2
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Paper Paperboard & Wood Pulp

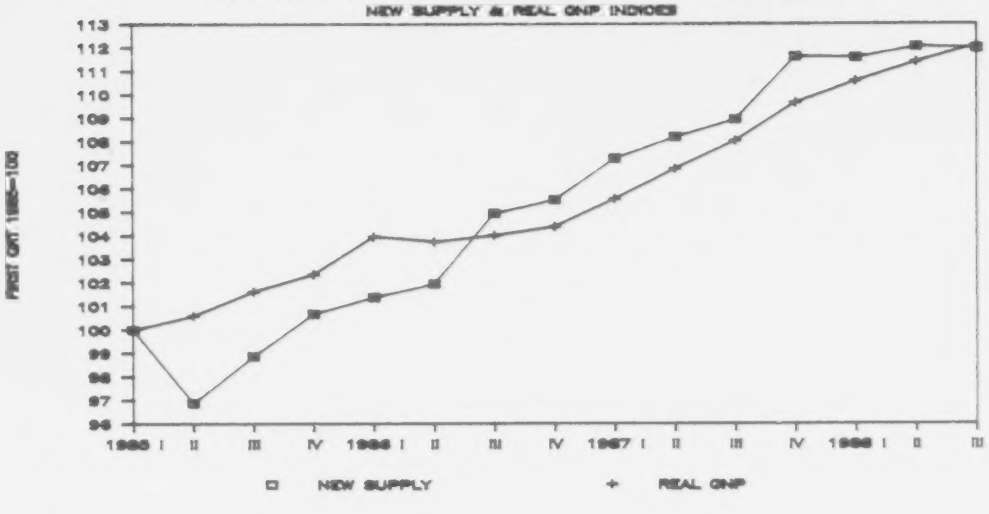
MONTHLY STATISTICAL SUMMARY - Vol. 66 No. 12 DECEMBER 1988

PAPER AND PAPERBOARD PRODUCTION: HOLDING FIRM

Paper and paperboard production continues on a track leading to a 1988 total of 76.8-77.0 million tons. The final tonnage will depend on the extent of the year-end shutdowns of those mills that continue to reserve the last few days of the year for that process. At the conservative 76.8 million tons total, production would establish a new high, 3.2% above last year's record 74.4 million tons. On this assumption both paper and paperboard production would establish new highs, with paper up 4.0%, paperboard 2.3%.

The new supply total (production of paper and paperboard plus imports less exports of both primary and converted products, a good proxy for total consumption) is also moving to a new record level. As of the third quarter of this year, the growth in new supply since the first quarter of 1985 -- the start of an inventory cycle in paper and paperboard production -- just about matched that of the real gross national product (Real GNP). The chart below shows the quarterly growth patterns of paper and paperboard new supply and real GNP from the first quarter of 1985 to the third quarter of 1988. The chart highlights the differences in the trends during the course of the cycle.

PAPER, PAPERBOARD, & PRODUCTS



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On the basis of complete data available for the first three quarters of 1988, new supply is pointing to a 1988 total of about 84 million tons, roughly 3% above the 1987 record. This would indicate a rate of about 644 pounds per capita, which would also establish a new high.

Production by grade: The major gains in paper production continue to be centered on printing-writing papers and packaging and industrial papers other than unbleached kraft. Total printing-writing papers are likely to reach at least 21.9 million tons, about 5.5% above 1987's high. The strongest growth appears to be in uncoated groundwood papers and coated papers, with each showing gains above 7%. Commercial printers were the major source of growth in demand for groundwood papers, while coated papers saw major demand increases from magazine and other periodical publishers, book publishers as well as commercial printers.

The 1988 uncoated free sheet total will probably show an increase of something less than 4%. However, the important bond and writing grades -- which include cut-size bond papers for the rapidly increasing personal computer population -- are pointing to gains in the neighborhood of 6%. The printing paper sector of uncoated free sheet papers will probably show a similar gain.

Among the remaining paper grades, the "other" packaging and industrial grades are posting particularly large increases. Data through 11 months show a gain in the neighborhood of 10%, largely concentrated in the specialty packaging papers. Tissue paper production is moving to a solid 3% increase, with unbleached kraft papers experiencing a small decline.

Production of each of the major paperboard grades is growing moderately, with the gains clustering relatively closely about the average for the total group. The largest increases are in recycled paperboard, with the 1988 increase at about 4%. Production of recycled folding boxboard is pointing to a somewhat larger increase than solid bleached boxboard.

Production of containerboard for domestic use is following a track fairly consistent with that of fibre box shipments. Based on eleven months of actual data, total shipments of fibre boxes in 1988 is likely to reach a new high of some 307.7 billion sq. ft., 3.3% above its 1987 high. Production of containerboard for domestic use is pointing to a 2.6% gain. These totals pretty well match final demand, and inventories of containerboard at mills and plants as of December 1, 1988 were below the total held at the beginning of the year. Inventories are currently equivalent to about 5.6 weeks of supply, compared to 5.7 weeks of supply one year ago.

Continued on Page 11

PAPER AND PAPERBOARD STATISTICS

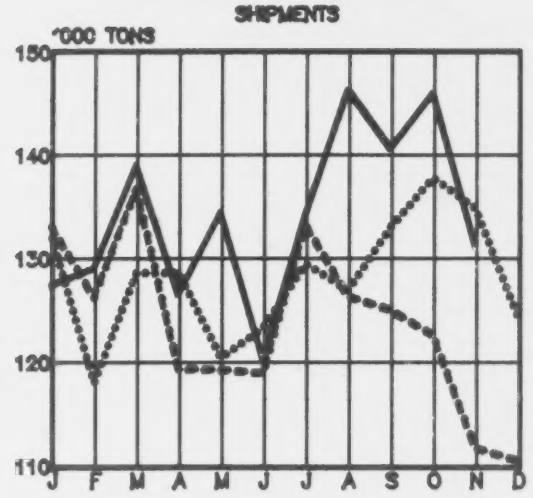
PRODUCTION, SHIPMENTS AND ORDERS
(Thousands of Short Tons)

	YEAR 1986	YEAR 1987	AUGUST 1988	SEPTEMBER 1988	OCTOBER 1988 (R)	NOVEMBER 1988 (P)	Annual Rate Y-T-D 1988	% Change From same Period Last Year
PAPER								
Newsprint - Production	5,638	5,842	509	492	508	493	5,968	2.4
- Shipments	5,638	5,854	506	493	508	502	5,941	1.9
Printing & Writing Sum	19,668	20,788	1,911	1,830	1,849	1,784	21,888	5.6
Groundwood Paper - Shipments	1,540	1,485	147	141	146	131	1,611	7.5
- New Orders	1,553	1,529	136	143	144	115	1,586	3.8
-Unfilled Orders	124	164	171	173	168	144	144	2.8
Coated Papers - Shipments	6,263	6,860	648	606	625	611	7,411	8.3
- New Orders	6,334	7,066	641	584	666	581	7,463	5.9
- Unfilled Orders	469	708	756	729	749	723	723	8.8
Unctd Free Sheet - Shipments	10,410	10,977	982	958	943	914	11,334	3.7
- New Orders	10,485	11,184	953	928	936	871	11,310	1.6
- Unfilled Orders	587	773	805	777	745	707	707	-3.6
Thin Papers - Shipments	271	251	19	16	21	20	227	-9.8
Cotton Fiber Paper - Shipments	152	163	13	13	15	13	163	-0.7
Bleached Bristols - Production	1,033	1,044	103	96	99	95	1,142	9.6
Tissue Paper - Production	5,095	5,381	471	456	473	455	5,488	3.7
Total Packaging & Other Paper	5,117	5,072	432	441	435	424	5,197	2.7
Unbl. Kraft Paper - Shipments	3,383	3,079	258	261	248	246	3,026	-1.6
Other Paper - Production	1,814	1,993	182	186	187	178	2,171	9.2
TOTAL PAPER-Production-Unadj.	35,518	36,994	3,323	3,218	3,265	3,157	38,541	4.4
-Production-S.A.			3,221	3,227	3,233	3,238	38,588	4.1
PAPERBOARD - PRODUCTION								
Solid Wood Pulp Furnish	27,336	28,944	2,555	2,417	2,427	2,344	29,417	1.9
Total Unbl. Kraft Paperboard	17,689	18,913	1,666	1,598	1,576	1,589	19,236	2.1
Unbl. Kraft Linerboard (1)	16,482	17,682	1,552	1,481	1,479	1,487	17,963	1.9
Production for Export	2,246	2,318	203	185	192	154	2,337	1.8
Other Unbl. Kraft Paperboard	1,207	1,232	114	109	97	102	1,273	4.1
Semichemical Paperboard	5,376	5,688	494	472	472	475	5,786	1.6
Production for Export	213	189	14	11	12	14	137	-28.6
Solid Bleached Paperboard	4,222	4,428	395	355	388	361	4,475	1.9
Production for Export	569	619	55	47	51	48	601	-2.9
Recycled Paperboard	8,092	8,586	738	711	775	714	8,844	3.7
Production for Export	78	75	6	3	2	7	68	-8.3
TOTAL PAPERBOARD-Prod.-Unadj.	35,379	37,439	3,284	3,127	3,203	3,058	38,261	2.3
- Containerboard Prod.(Dom. Use)	21,426	23,016	2,003	1,948	1,954	1,899	23,517	2.2
- Boxboard Prod.(Dom. Use) (2)	5,863	6,026	539	498	529	505	6,235	3.8
- All Other P'bd Prod.(D.U.) (2)	4,992	5,196	463	435	463	429	5,367	3.4
- Total Paperbd Prod. for Export	3,097	3,281	279	247	257	224	3,143	-1.2
TOTAL PAPERBOARD PROD.- S.A.			3,174	3,157	3,141	3,125	38,077	2.8
TOTAL PAPER AND PAPERBOARD Production - Unadj. (R)	70,889	74,433	6,607	6,345	6,467	6,214	76,802	3.4
Production - S.A.			6,395	6,384	6,374	6,363	76,585	3.1

(1) Includes all exports of kraft paperboard. R - Revised P - Preliminary S.A. - Seasonally Adjusted
(2) Data for unbl. kraft folding boxboard incl. in All Other P'bd.

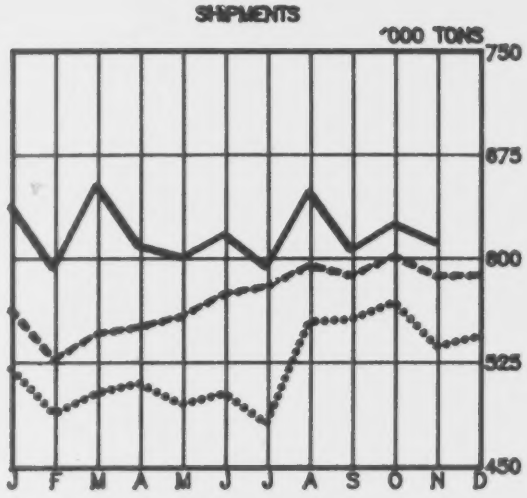
GROUNDWOOD PAPER, UNCOATED

SHIPMENTS



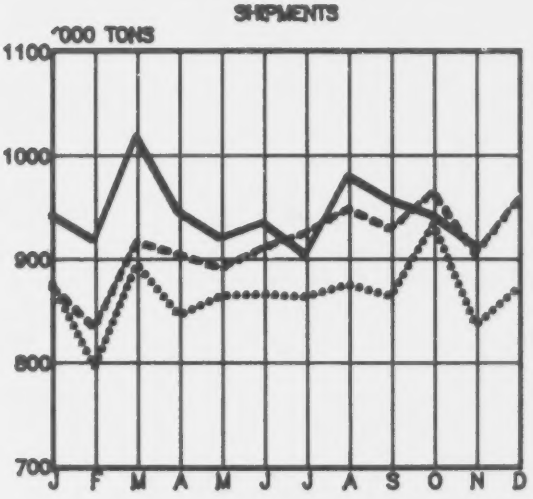
COATED PAPER

SHIPMENTS



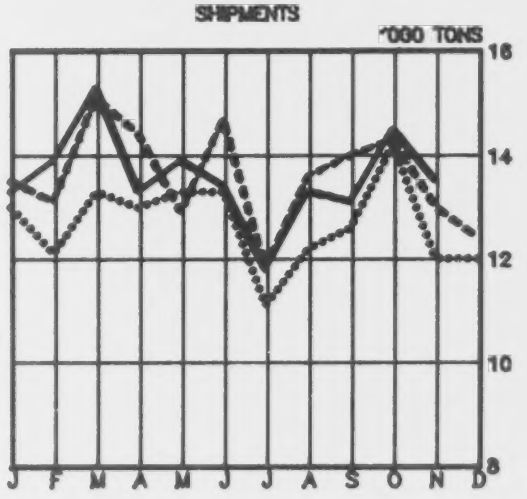
UNCOATED FREE SHEET PAPERS

SHIPMENTS



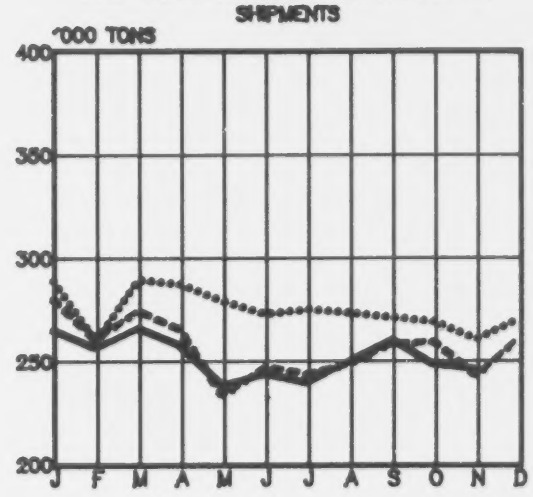
COTTON FIBER PAPER

SHIPMENTS



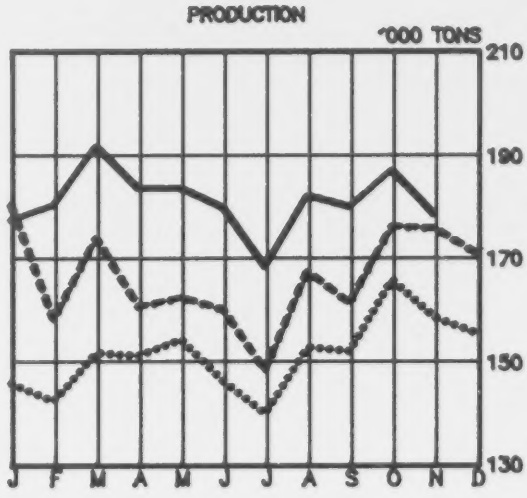
UNBLEACHED KRAFT PACKAGING AND INDUSTRIAL CONVERTING PAPER

SHIPMENTS



OTHER PAPER

PRODUCTION



1986 ••••••• 1987 - - - - - - 1988 ———

WOOD PULP STATISTICS
(Thousands of Tons)

	YEAR 1986	YEAR 1987	JULY 1988	AUGUST 1988	SEPTEMBER 1988	OCTOBER 1988	Annual Rate Y-T-D 1988	% Change from same Period Last Year
TOTAL WOOD PULP					R	P		
Total Wood Pulp - Production	57,005	59,552	5,219	5,265	5,006	5,078	61,132	2.7
- Imports	4,582	4,850	416	460	379	436	5,039	4.1
- Exports	4,458	4,889	392	497	518	421	5,443	13.4
- New Supply	57,129	59,513	5,243	5,227	4,867	5,093	60,728	2.0
Dissolving Pulp - Production	1,258	1,312	117	119	135	99	1,354	5.9
- Imports	255	198	11	24	19	15	231	6.6
- Exports	711	752	56	63	81	74	844	13.6
- New Supply	801	757	72	81	73	40	741	-1.5
Paper Grades - Production	46,081	48,293	4,241	4,272	4,045	4,100	49,479	2.5
Chemical Pulp - Imports	4,220	4,456	375	404	338	374	4,426	-0.4
- Exports	3,689	4,111	331	431	434	344	4,553	12.9
- New Supply	46,612	48,637	4,284	4,244	3,949	4,130	49,353	1.4
Groundwood and - Production	5,476	5,702	497	504	473	513	5,963	4.7
Thermo-Mech. - Imports	188	197	30	32	21	47	382	108.8
- Exports	59	26	4	3	3	4	47	103.4
- New Supply	5,525	5,872	523	532	492	557	6,298	7.5
Semi-Chemical - Production	4,191	4,246	363	371	353	367	4,336	1.7
- Imports								
- Exports								
- New Supply	4,191	4,246	363	371	353	367	4,336	1.7
MARKET WOOD PULP								
Total Market - Production	7,572	8,114	728	755	727	646	8,409	4.2
Wood Pulp - Imports	3,122	3,235	291	325	281	285	3,461	7.6
- Exports	4,470	4,820	382	442	420	380	4,908	3.0
- New Supply	6,224	6,529	636	638	588	551	6,963	6.8
Dissolving Pulp - Production	1,251	1,308	117	119	135	99	1,352	6.9
- Imports	212	154	11	22	18	9	199	20.6
- Exports	718	775	48	63	93	56	777	1.1
- New Supply	745	687	79	77	59	52	773	15.3
Paper Grades - Production	6,315	6,806	611	636	593	547	7,057	3.9
Chemical Pulp - Imports	2,831	2,975	267	294	254	262	3,102	5.2
- Exports	3,752	4,045	334	379	327	324	4,131	3.3
- New Supply	5,394	5,736	544	551	520	485	6,029	5.8
Groundwood Pulp - Production	5	0	0	0	0	0	0	0
and All Other - Imports RS	79	106	13	10	9	15	161	53.8
- Exports	0	0	(0)	0	0	0	(0)	0.0
- New Supply	85	106	13	10	9	15	161	54.2

SOURCES: Total Wood Pulp Production & Market Wood Pulp Production, Imports & Exports - Pulp Division, Pulp, Materials and Technology Group, API. Total Wood Pulp Imports & Exports - Department of Commerce.

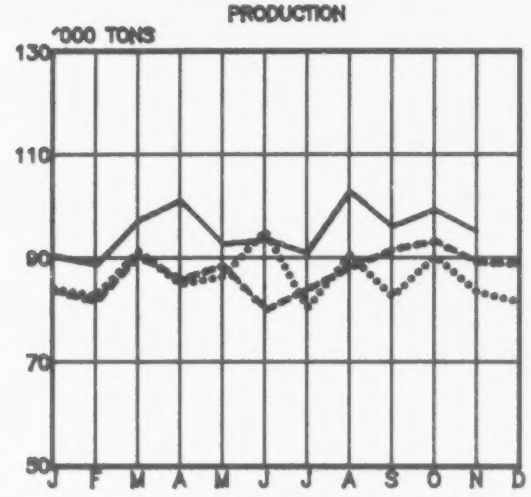
FIBROUS RAW MATERIALS
(Thousands of tons)

	YEAR 1986	YEAR 1987	JULY 1988	AUGUST 1988	SEPTEMBER 1988	OCTOBER 1988	Annual Rate Y-T-D 1988	% Change from same Period Last Year
CONSUMPTION AT PAPER & PAPERBOARD MILLS					R	P		
Total	74,345	77,770	6,685	6,847	6,463	6,722	79,810	2.7
Total Wood Pulp	57,861	59,474	5,160	5,236	4,927	5,158	60,980	2.6
Waste Paper	17,285	18,296	1,525	1,611	1,536	1,565	18,830	2.9
INVENTORIES								
Chemical Paper Grade Market Pulp								
Producers' Own-Use Inventories	174	170	194	199	198	161	161	-0.1
Producers' Market Inventories	284	224	236	247	272	275	275	3.3
Consumers' Purchased Inventories #	496	529	548	634	628	583	583	9.8
Waste Paper at Paper & Bd. Mills	838	920	905	970	1,066	1,056	1,056	20.5
Days of Supply at Pulp Mills of Chemical Paper Grade Mkt Pulp	16	12	12	13	14	15	15	7.1

SOURCES: Wood Pulp Data, Pulp Division, Pulp, Materials and Technology Group, API. Waste Paper Data, Paper Recycling Committee, API. # Includes all grades of wood pulp.
P - Preliminary; R - Revised; (0) - Indicates zero to five-hundred short tons RS - 1988 Revised Series

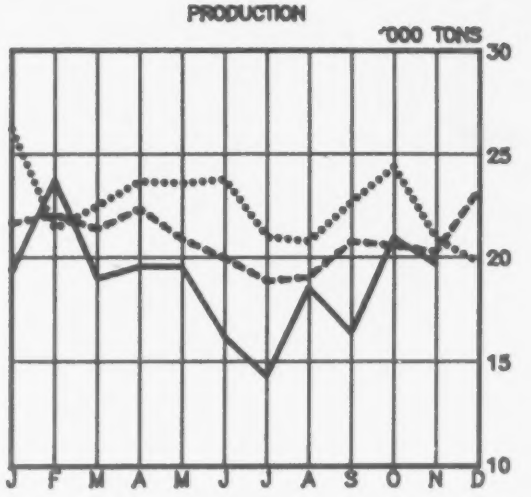
BLEACHED BRISTOLS

PRODUCTION



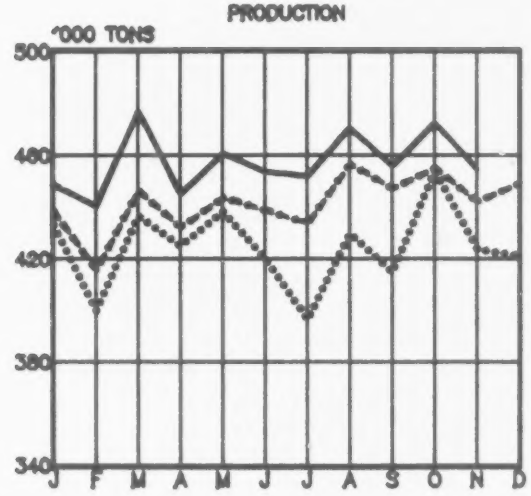
THIN PAPER

PRODUCTION



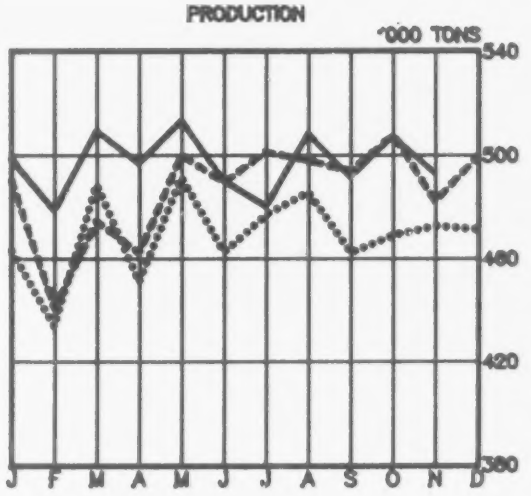
TISSUE PAPER

PRODUCTION



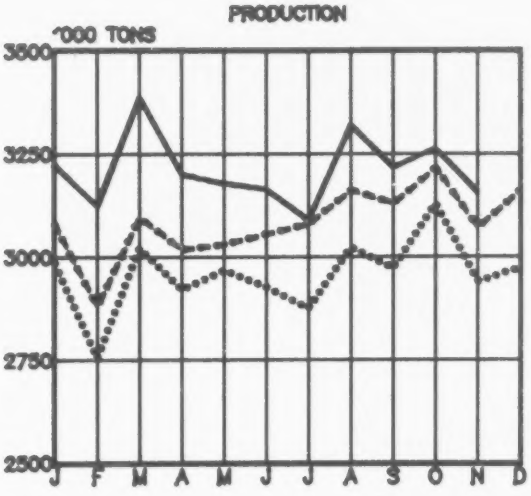
NEWSPRINT

PRODUCTION



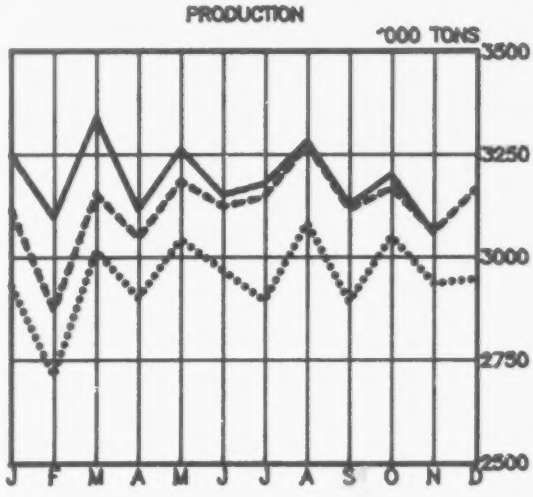
TOTAL PAPER

PRODUCTION



TOTAL PAPERBOARD

PRODUCTION



1986 ••••••••• 1987 - - - - 1988 ———

F I B R O U S R A W M A T E R I A L S
(Thousands of Standard (128 cubic foot) Cords)

		YEAR 1986	YEAR 1987	JULY 1988	AUGUST 1988	SEPTEMBER 1988	OCTOBER 1988	Annual Rate Y-T-D 1988	% Change From Same Period Last Year
PULPWOOD									
Total U.S.	- Total Receipts	90,943	94,312	7,652	8,007	8,080	8,245	95,134	0.2
	- Total Consumpt	91,434	93,946	7,901	7,951	7,956	7,908	95,294	1.3
	- Residues *	32,755	32,899	2,697	2,769	2,723	2,869	33,125	0.2
	- Inventories	4,794	5,096	4,232	4,325	4,484	4,726	4,726	-10.8
So. Atlantic	- Total Receipts	29,513	31,147	2,541	2,653	2,688	2,731	31,319	0.3
	- Total Consumpt	29,425	30,915	2,613	2,652	2,686	2,650	31,465	1.8
	- Residues *	9,343	9,553	800	795	799	903	9,816	3.4
	- Inventories	994	1,211	980	997	1,048	1,134	1,134	-9.7
Northeast	- Total Receipts	7,277	6,941	569	623	622	645	7,104	1.5
	- Total Consumpt	7,227	7,109	578	599	549	565	7,230	0.9
	- Residues *	1,419	1,543	107	150	138	133	1,630	5.6
	- Inventories	484	594	430	429	482	507	507	-6.5
South Central	- Total Receipts	31,790	33,650	2,632	2,835	2,914	2,825	33,508	-0.7
	- Total Consumpt	32,113	33,059	2,742	2,789	2,876	2,706	33,426	1.4
	- Residues *	9,792	9,992	815	830	816	836	9,857	-2.4
	- Inventories	926	1,294	937	987	1,030	1,147	1,147	-15.8
North Central	- Total Receipts	6,571	6,552	557	556	545	563	6,938	5.3
	- Total Consumpt	6,730	6,764	566	565	519	568	6,958	2.8
	- Residues *	1,042	1,263	107	118	116	100	1,366	14.5
	- Inventories	892	830	802	803	825	852	852	-3.5
West	- Total Receipts	15,792	16,022	1,353	1,340	1,311	1,481	16,265	-0.5
	- Total Consumpt	15,939	16,099	1,402	1,346	1,326	1,419	16,216	-0.1
	- Residues *	11,159	10,548	868	876	854	891	10,457	-2.5
	- Inventories	1,498	1,167	1,083	1,109	1,099	1,086	1,086	-13.6

* - Consumption of Residues in Cord Equivalents. SOURCE: American Pulpwood Association 16-Dec-88

U N I T E D S T A T E S T R A D E W I T H C A N A D A

IMPORTS FROM CANADA

	YEAR Tons	1987 ($000's)	SEPTEMBER 1988 Tons	SEPTEMBER 1988 ($000)	OCTOBER 1988 Tons	OCTOBER 1988 ($000)	Annual Rate Y-T-D 1988 Tons	% Change From same Period Last Year
Pulpwood, Roundwood (in cords of 128 cubic feet)	15,382	1,736	8,278	696	1,424	107	44,252	340.7
Pulpwood chips	487,147	15,250	84,058	4,489	65,490	2,264	852,034	97.2
Wood Pulp, Total	4,320,114	1,842,019	388,546	170,333	390,161	217,226	4,327,457	0.3
Waste Fibrous Materials, Total	186,286	36,423	20,552	4,046	18,875	4,067	238,647	31.8
Paper, Board & Products, Total	10,588,847	5,093,903	896,810	497,877	879,346	486,482	10,751,048	1.1
Paper, Paperboard,Wet Machine Bd. & Constr. Paper & Bd.	10,441,472	4,845,663	883,557	474,047	864,915	462,600	10,602,385	1.1
Paper, Paperboard & Products	10,365,412	5,027,943	874,010	491,370	856,245	479,713	10,530,136	1.2
Paper & Paperboard, Only	10,210,838	4,779,702	860,756	467,540	841,814	455,830	10,381,473	1.2
Paper, Total	9,961,198	4,698,148	841,500	466,500	817,476	446,462	10,114,775	1.2
Newsprint	8,588,309	3,956,147	701,020	372,704	679,509	358,949	8,497,493	-1.5
Printing, Writing & Rel. Pap.	1,111,641	601,978	113,949	71,617	114,833	73,114	1,325,955	19.7
Pack. & Ind. Conv. Paper	215,514	102,986	21,742	11,507	18,852	10,561	236,767	8.5
Special Industrial Paper	5,478	9,844	463	966	234	374	4,466	-16.9
Tissue Paper	40,257	27,194	4,326	3,705	4,049	3,465	50,094	27.7
Paperboard, Total	257,639	81,554	19,256	6,961	24,338	9,368	266,698	4.0
Convtd Paper&Paperbd Products	146,575	248,241	13,254	23,830	14,431	23,882	148,663	1.5
Wet Machine Board	2,890	1,977	293	202	298	241	3,111	7.4
Construction Paper & Board	219,744	63,983	22,507	6,306	22,803	6,528	217,888	-5.3

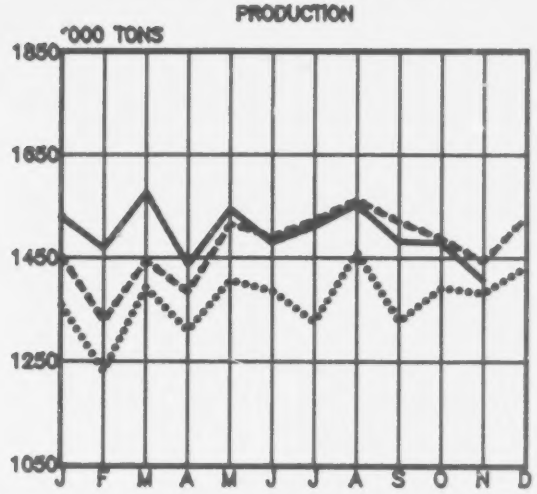
EXPORTS TO CANADA

Pulpwood, Roundwood (in cords of 128 cubic feet)	12,617	778	904	60	898	63	12,924	1.1
Pulpwood chips	61,575	4,814	1,673	64	864	40	37,601	-45.2
Wood Pulp, Total	198,921	75,956	29,411	9,766	18,915	8,786	271,499	31.3
Cotton Pulp & Other Pulp	58,288	14,775	4,404	1,384	7,978	2,416	79,733	43.7
Waste Paper	286,898	30,592	30,662	3,712	26,233	3,054	336,457	20.7
Paper, Board & Products, Total	957,434	598,429	88,190	62,588	76,852	57,178	1,199,058	25.5
Paper, Paperboard,Wet Machine Bd. & Constr. Paper & Bd.	712,494	398,256	65,155	41,039	57,168	37,298	920,598	29.7
Paper, Paperboard & Products	920,755	581,481	84,469	60,883	72,958	55,689	1,162,520	26.6
Paper & Paperboard, Only	675,815	381,308	61,433	39,333	53,266	35,719	884,060	32.6
Paper, Total	297,585	250,807	28,302	26,582	27,708	24,303	347,835	17.8
Newsprint	4,525	3,728	1,226	1,159	988	850	5,938	22.1
Printing, Writing & Rel. Pap.	151,716	125,667	13,505	13,538	13,169	14,095	171,130	15.8
Pack. & Ind. Conv. Paper	25,826	17,841	4,122	2,995	2,928	2,263	39,838	54.5
Special Industrial Paper	110,107	97,080	8,588	8,051	9,946	6,316	123,980	11.3
Tissue Paper	5,411	6,490	861	839	678	779	7,029	29.1
Paperboard, Total	378,230	130,501	33,132	12,752	25,558	11,416	536,225	44.3
Convtd Paper&Paperbd Products	244,940	200,173	23,036	21,549	19,692	19,971	278,461	10.8
Wet Machine Board	10,212	4,828	522	201	210	105	6,604	-38.3
Construction Paper & Board	26,467	12,120	3,200	1,505	3,684	1,384	29,934	11.0

SOURCE: Bureau of Census, Department of Commerce . E - Estimate of tonnage based on square foot data 16-Dec-88

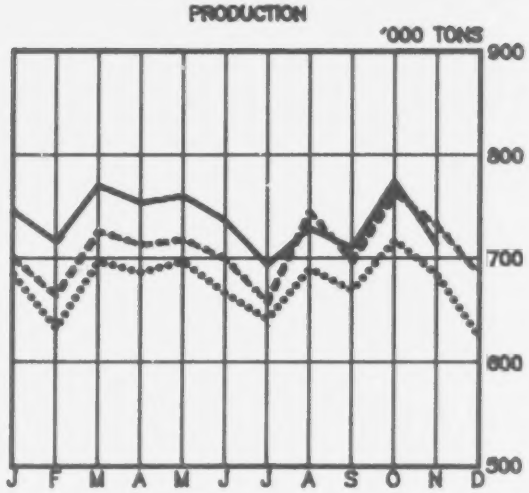
UNBLEACHED KRAFT LINERBOARD

PRODUCTION



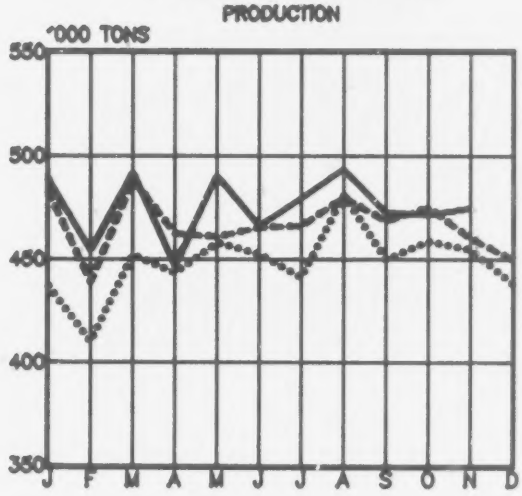
RECYCLED PAPERBOARD

PRODUCTION



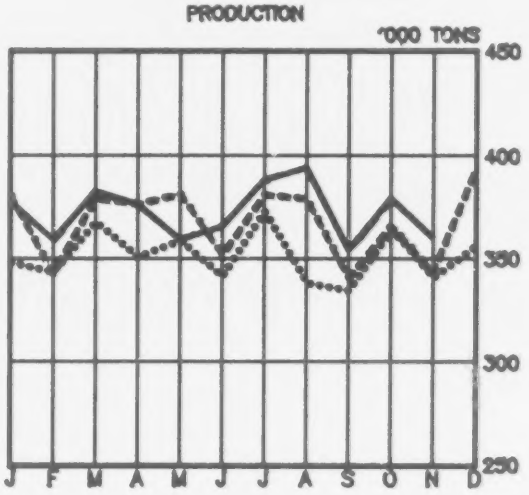
SEMICHEMICAL PAPERBOARD

PRODUCTION



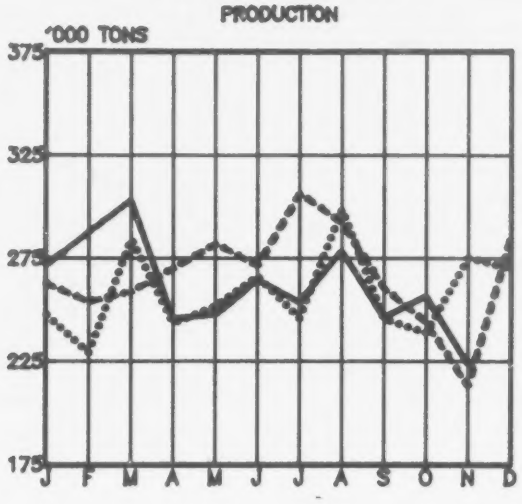
SOLID BLEACHED PAPERBOARD

PRODUCTION



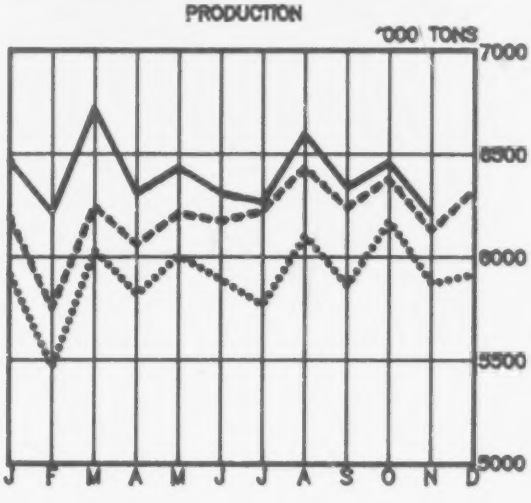
PAPERBOARD FOR EXPORT

PRODUCTION



TOTAL PAPER AND PAPERBOARD

PRODUCTION



1986 ..... 1987 -----1988 ——

I M P O R T S

	YEAR 1987 Tons	YEAR 1987 $000	1988 SEPTEMBER Tons	1988 SEPTEMBER $000	1988 OCTOBER Tons	1988 OCTOBER $000	(1) Annual Rate YTD 1988 Tons	% Change from same Period Last Year
Pulpwood Roundwood (cords)	15,432	1,746	8,278	696	1,600	111	44,466	340.2
Pulpwood Chips	525,629	15,476	85,297	4,538	65,518	2,274	865,542	82.2
Total All Imports	17,891,172	9,243,600	1,542,794	925,678	1,534,489	921,049	18,479,954	3.5
Wood Pulp Total	4,850,238	2,069,389	378,789	211,695	435,547	243,642	5,038,420	4.1
Waste Paper	127,398	19,231	15,601	2,461	12,865	2,160	167,419	38.5
Other Fibrous Materials	76,491	27,287	6,900	2,475	8,913	3,020	94,973	21.1
Paper Board & Products Total	12,837,046	6,927,693	1,141,504	709,046	1,077,165	672,226	13,179,142	2.9
Paper Paperboard Wet Machine Bd. & Construction Paper & Board	12,435,486	5,995,122	1,104,777	623,325	1,034,949	580,727	12,750,656	2.8
Paper Ppbd & Prds ex Cnst&WMB	12,527,598	6,828,736	1,108,327	698,046	1,044,009	661,825	12,853,468	2.9
Paper & Paperboard Only	12,126,039	5,896,165	1,071,601	612,325	1,001,793	570,326	12,424,982	2.8
Paper Total	11,765,208	5,768,703	1,046,060	602,523	970,388	558,084	12,082,645	3.1
Newsprint	8,986,548	4,121,327	742,099	391,941	783,213	369,994	8,814,402	-2.1
Printing & Writing	2,410,216	1,412,458	266,875	184,749	232,989	163,187	2,855,145	21.8
Uncoated Groundwood	1,269,774	654,767	125,006	75,797	116,699	70,299	1,422,860	14.2
Coated Print.& Impreg. Pap.	674,531	467,865	83,896	68,564	59,662	50,171	801,455	22.2
Uncoated Free Sheet	417,395	249,943	50,358	35,003	51,385	38,063	566,702	44.2
Uncoated Book	210,624	119,775	28,201	18,754	19,178	14,236	249,770	17.0
Writing and Similar Paper	206,771	130,168	22,157	16,249	32,207	23,828	316,932	76.6
Thin (except Cigarette)	47,567	38,831	5,852	4,646	5,215	4,551	59,235	22.0
Bristols	950	1,052	1,764	739	28	23	4,892	448.5
Total Pkg & Other Paper	310,324	191,620	32,689	21,933	29,702	21,086	349,669	10.2
Unbleached Kraft Paper	168,420	69,828	15,327	7,430	12,261	5,960	168,352	-3.5
Other Pkg. & Indust. Paper	141,904	121,792	17,362	14,503	17,441	15,126	181,317	27.0
Tissue	58,121	43,299	4,397	3,900	4,485	3,897	63,429	13.4
Paperboard, Total	360,831	127,461	25,541	9,802	31,405	12,242	342,338	-5.9
Test or Containerboard	80,981	29,352	7,549	3,036	9,439	3,871	83,222	3.6
Semi-Chemical Corrugating	128,636	33,898	10,398	3,353	12,842	4,072	147,873	17.8
Other Paperboard	151,214	64,211	7,593	3,413	9,124	4,299	111,243	-29.6
Convtd Paper&Paperbd Products	401,559	932,571	36,726	85,721	42,216	91,499	428,486	5.9
Paper Products, Total	368,179	866,121	34,030	80,701	38,821	85,591	391,398	5.6
Paperboard Products, Total	33,380	66,450	2,696	5,020	3,395	5,908	37,088	9.6
Wet machine Board	3,463	2,638	461	412	312	254	4,354	25.1
Construction Paper & Board	305,985	96,320	12,716	10,588	32,844	10,148	321,319	8.7
Notes								
Other: No Weight Avail. ($000)		201,453		15,304		16,990	181,461	-12.2
Total Imports Incl. Other($000)		9,245,053		940,982		938,040	10,879,260	19.0

E X P O R T S

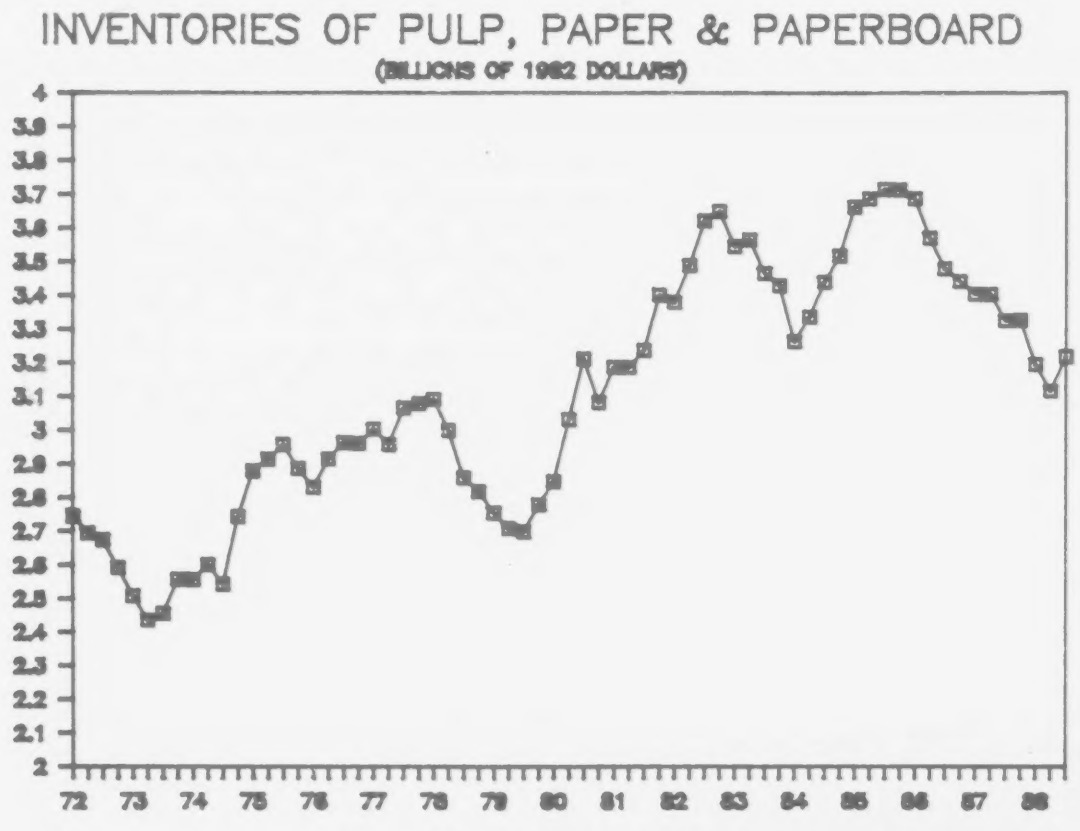
							(1)	
Pulpwood, Roundwood (cords)	16,178	913	904	60	1,287	80	14,401	-4.3
Pulpwood Chips	2,546,467	188,459	379,162	32,555	338,411	28,912	3,414,183	39.4
Total All Exports	14,797,437	6,007,818	1,518,279	688,357	1,350,457	603,573	16,861,735	15.9
Wood Pulp,Total	4,889,331	2,259,377	517,617	277,926	420,886	232,726	5,443,165	13.4
Cotton Pulp and Other Pulp	182,001	91,365	13,853	9,113	15,738	8,655	197,251	9.7
Waste and Old Paper	4,422,139	553,348	466,945	57,181	676,915	57,206	5,530,316	29.9
Paper, Board & Products,Total	5,303,966	3,103,728	519,864	344,136	436,918	304,986	5,691,002	7.1
Paper,Paperboard,Wet Machine Bd. & Construction Paper & Board	4,578,770	2,280,329	452,254	249,518	371,623	213,862	4,875,604	6.2
Paper, Ppbd & Prod ex Cnst&WMB	5,196,613	3,044,506	509,220	338,866	425,507	298,932	5,556,137	6.7
Paper & Paperboard, Only	4,471,418	2,221,107	441,651	244,247	360,213	207,008	4,740,738	5.7
Paper, Total	921,397	776,181	103,016	91,912	98,073	86,667	1,078,883	18.3
Newsprint	339,773	210,093	48,831	32,031	44,092	29,253	403,094	18.9
Printing & Writing	249,092	242,639	22,341	26,784	22,560	27,524	282,990	15.9
Uncoated Groundwood	55,841	39,750	5,843	5,327	4,724	3,967	64,672	17.9
Clay Coated Paper	100,839	72,145	6,883	6,235	7,297	6,471	99,655	2.0
Uncoated Free Sheet	67,858	99,330	6,870	10,897	7,121	11,290	83,373	25.7
Other Printing & Writing	24,554	31,414	2,746	4,325	3,417	5,796	35,290	39.6
Total Pkg. & Other Paper	294,201	292,659	29,232	30,207	28,847	27,040	347,604	19.6
Unbleached Kraft	89,194	40,758	11,576	5,879	9,826	4,928	106,142	24.2
Other Pkg. & Indust. Paper	205,007	251,901	17,656	24,328	19,021	22,112	241,462	17.7
Tissue	38,332	30,790	2,613	2,890	2,575	2,851	45,195	18.0
Paperboard, Total	3,550,021	1,444,926	338,635	152,336	262,140	120,340	3,661,855	2.5
Solid Wood Pulp	3,218,952	1,321,618	317,122	141,513	242,346	110,358	3,376,301	4.0
Total Linerboard	2,296,633	812,161	223,940	88,938	153,113	59,135	2,275,094	-1.8
Bleached Kraft Linerboard	102,266	46,429	10,644	5,891	9,692	5,001	130,108	53.7
Unbleached Kraft Linerbd	2,194,367	765,731	213,295	83,047	143,421	54,134	2,144,986	-3.9
Other Unbleached Kraft	210,566	78,596	27,271	9,723	21,829	7,377	323,521	50.8
Other Bleached Kraft	647,803	407,923	64,816	42,200	66,239	43,292	736,589	13.8
Semi-Chemical Corrugating	61,951	22,938	1,096	653	1,165	554	41,096	-38.9
Recycled Paperboard	331,069	123,308	21,512	10,822	19,794	9,983	285,554	-12.5
Convtd Paper&Paperbd Products	725,196	823,399	67,569	94,618	65,295	91,924	815,398	12.9
Paper Products, Total	301,202	540,681	32,069	62,216	32,346	61,030	365,256	22.1
Paperboard Products, Total	423,994	282,718	35,500	32,402	32,948	30,894	450,142	6.4
Wet Machine Board	17,328	7,816	911	394	906	404	11,925	-35.3
Construction Paper & Board E	90,024	51,405	9,733	4,877	10,504	5,650	122,940	41.0
Notes								
Other: No Weight Avail. ($000)		8,037		700		757	9,046	15.0
Total Exports Incl. Other($000)		6,015,855		689,057		604,331	7,404,733	25.4

SOURCE: Bureau of Census, U.S. Departmer of Commerce. E - Incl. estim. of tonnage based on square foot data.
(1) Annual Rate Year-To-Date is in tons unless otherwise specified in item description.

PRODUCER PRICE INDEXES
1982 = 100

	1986	1987	AUGUST 1988	SEPTEMBER 1988	OCTOBER 1988	NOVEMBER 1988	Annual Rate Y-T-D 1988	% Change from same Period Last Year
Pulp, Paper and Products except Building Grades	107.5	114.3	126.3	127.6	128.2	128.2	124.4	9.1
Pulp Paper & Products, ex. Building Grades & ex Waste Paper *	106.9	113.2	125.3	126.6	127.3	127.5	123.4	9.3
Total Wood Pulp	94.7	111.5	141.0	142.3	145.2	145.2	136.0	22.6
Total Paper	107.0	111.5	124.7	125.4	127.0	127.5	122.8	10.4
Total Paper, exc. Newsprint	107.9	110.6	125.4	126.1	128.6	128.6	122.8	11.5
Newsprint	103.3	112.3	127.3	127.3	127.3	127.1	127.6	14.0
Total Paperboard	106.5	110.1	134.5	136.3	136.5	136.5	132.9	13.0
Total Paper and Paperboard *	106.8	113.6	127.0	128.8	130.0	130.3	126.0	11.2
Converted Products	109.4	114.7	124.2	125.8	126.1	126.3	122.6	7.1
Waste Paper	142.6	101.4	105.4	105.5	179.2	168.8	105.9	2.7
All Commodities	100.2	102.8	108.0	108.1	108.2	108.3	106.8	4.0
Industrial Commodities	100.0	102.6	107.1	106.9	107.1	107.4	106.1	3.6

SOURCE: Producer Price Indexes: Bureau of Labor Statistics, U.S. Department of Labor * Computed by API



CHEMICAL PAPER GRADE MARKET WOOD PULP

Production of chemical paper grade market pulp rose slightly from October to November, but the level remained well below that of the first nine months of the year. If production remains near its current rate through December, the 1988 total would be in the neighborhood of 7 million short tons, roughly 3% above the 1987 total. However, that total would still be a new high and the operating rate for the year as a whole in the mid-90's, based on the API's recently-released Capacity Survey.

North American and Nordic producers' inventories of these grades of wood pulp showed an upward tick in October and November, but the total was no higher than it was back in mid-1986. These inventories at U.S. mills are still a modest 16 days of supply.

Shipments of chemical paper grade market pulp from U.S. mills in the first eleven months of 1988 were about 3% over their year-ago total. The major gain was a 24% increase in shipments to Japan. Shipments to the domestic market were up by 1%, but total shipments to all other markets just matched their year-ago levels.

MILL INVENTORIES OF PULP, PAPER, AND PAPERBOARD

The cyclical behavior of pulp, paper and paperboard production is dependent on customer usage patterns and variations in market-channel inventory holdings. The market distribution channels for paper industry products comprise several levels of inventory. In particular, inventories are held by mills, converting plants, wholesalers, and final users. Inventories at mills and converting plants are of various stages of fabrication, while those held by wholesalers and final users are generally finished products.

In order to analyze the mill-level dollar value inventory data published by the Department of Commerce, API's Economics Department deflated dollar volume figures by a weighted index of producer price indexes (PPIs) for pulp, paper and paperboard.

The deflated data series measures seasonally-adjusted end-of-quarter inventories of pulp, paper, and paperboard mills stated in billions of 1982 dollars. As can be seen from the graph on page 10, these inventories have followed a long-term upward trend in accordance with the industry's rising output and sales, but there have been significant variations about the long-term trend. For instance, mill inventories declined sharply in the aftermath of the 1981-82 recession, but then began rising again as the economy slowed during mid-1984 and as converters, wholesalers, and final users began to reduce their own holdings of paper and paperboard products.

Continued on Page 12

Inflation-adjusted inventories of pulp, paper and paperboard mills peaked during mid-1985 and then declined through the second quarter of 1988. They edged slightly higher in the third quarter of 1988, but still remained at moderate levels.

These changes in inventories can have large impacts on production levels. For example, the sharp increase in inventories recorded in 1984 had a strong positive impact on production. As producers stopped expanding their inventories at the end of 1984, this support to production disappeared. The decline in inventories in the last half of 1985 acted as a further negative pressure on production; these losses of demand for inventories were major factors in bringing the 1985 production totals below those of 1984.

Although inventories continued to decline in 1986 and 1987, the inventory effect was offset by major increases in user demand. In these years demand was, in fact, so strong that the reduction in inventories was required to augment the available supply. At the same time, end-users probably increased their own inventories to bring them into line with their higher usage totals.

Nevertheless, total inventories held by manufacturers are still low relative to sales. There may be instances where inventories of some specific paper products held by users are relatively high. However, the available data on all inventories in the hands of manufacturers indicate that there is little likelihood of an inventory recession in the near future.